Thinking End-to-End: Time for Cinderella to Go to the Ball?

The Landscape

Recently I was asked if I had a definition that distinguished between “Core Processes,” “Management Processes,” and “Support Processes.” This was because one of my colleagues wanted to build a process landscape for his client. I am sure most people are familiar with landscape models that look something like the example in Figure 1. They are typically used as the top layer in hierarchical process architectures.

The question provoked a discussion with other colleagues, which resulted in a range of different answers and, of course, more questions: “What about value chains?” “What about value streams?” and “Who cares?” Well, the last is a good question, and we can endlessly debate the usefulness of process architectures and frameworks (there are plenty of relevant articles here on BPTrends), but what most people agree on is that "end-to-end" processes or Value Streams are important for understanding and designing how businesses should operate.
The Route

So what is an end-to-end process? Is it the same as a Value Chain or Value Stream? Typically, an end-to-end process is a chain of process steps (or subprocesses) that starts as the result of a customer trigger and proceeds through until a successful outcome for the customer is achieved. A well-known example of an end-to-end process is “Order-to-Cash.” Here a customer contacts a business with the intention of placing an order for a product. This initiates a process that handles the placing of the order, the processing of the order, delivery (possibly manufacture), invoicing, and revenue collection. Of course, people may immediately want to debate where the “ends” in the end-to-end process actually are. For instance, you could argue that starting the process when a customer wants to place an order misses some key sales and marketing steps. To get around this, some people prefer to describe this process as “Lead-to-Cash,” which covers the whole potential product-buying lifecycle.

You can also argue that “Order-to-Cash” is a rather internally focused viewpoint. It is an “inside-out” view of the world, rather than the “outside-in” approach that takes the customer’s viewpoint. However, we have to be careful here as we need to balance the needs of the customer with the needs of the business and its stakeholders. It’s all very well taking a customer viewpoint; of course, the customer is happy when they get their product, but they are not so worried about paying for it! The business, on the other hand, needs to make sure that it delivers to the customer, but also that it gets the payment and the check doesn’t bounce. I have seen examples of companies that were so eager to launch a new product that they didn’t put in place a process for billing for it until several months after launch!

So an end-to-end process needs to have some key characteristics:

- It must reflect the customer’s view of when they initiate the process and when they get a successful outcome.
- It must reflect the organization’s view of when the customer interaction is complete and a business objective has been met.
- It must be capable of being measured, and those measures must take account of the customer view and the organizational view.

Is an end-to-end process the same as a Value Chain or Value Stream? Well, a value chain is very similar to an end-to-end process, but has a different viewpoint. George Brown from the Value Chain Group [1] describes a Value Chain as “a series of value-adding activities that connect a company’s supply side with its demand side.” In contrast, he says, “Value Streams relate to the value-adding activities that satisfy the need of different customer types.” By this definition, Value Streams are end-to-end processes, but Value Streams only describe a subset of the processes that operate a business. The latest trend is to talk about Value Nets [1] that provide a more collaborative approach to delivering customer value.

So end-to-end processes are Value Streams, but the definition of the term “end-to-end process” is not formally defined and people may well include other processes that would not normally fit into the Value Stream category. If that’s the case, should we stop talking about end-to-end processes? We may well find that over time the Value Chain Group terminology becomes ubiquitous and terms like “end-to-end” fall into disuse. You can learn more about these different definitions in George Brown’s article [1] and in a previous Technical Brief by Celia Wolf [2].

The Journey

Of course, nothing is quite as simple as we would like. If the customer is buying a straightforward product for which they make a one-off payment we can see that the process ends once cash has been received. That’s cash from the bank, of course, not just the receipt of the customer payment, because the customer or the bank may default on the payment. This illustrates an important point about measuring the end-to-end. You must choose measures that correctly reflect the objectives the process is trying to achieve (generating revenue) and be wary of those that may be of interest (delivery time) but don’t tell the whole story.
However, what happens if it’s a more complex product where there is a monthly subscription attached? Does the end-to-end process include collecting all those monthly subscriptions? Well, if it does, the process may never end, or, at the very least, it is going to be a long lasting process, which is not very useful for analysis and measurement purposes. So an obvious answer is that “Lead-to-Cash” ends once the initial payment or the first month’s subscription has been received, and that some other process looks after subsequent subscription billing. Of course, the question is which other process? And does that process fit in a different end-to-end process? Furthermore, in some cases, “Lead-to-Cash” will deliver pre-manufactured products, while, in other cases, the product will be manufactured to order. So another question arises: Does “Lead-to-Cash” include manufacturing?

Despite these issues, “Lead-to-Cash” is one of the more obvious examples of an end-to-end process where we can connect together a sequence of subprocesses that are dedicated just to “Lead-to-Cash” (or seem to be). What other end-to-end processes might we have? Most businesses also have a customer problem-handling process, which we might call “Problem-to-Resolution.” Here a customer contacts a call center with a problem, and a number of different departments or organizations work to diagnose the problem and restore service or resolve the customer’s problem. This example is not so clear cut. For instance, if a customer reports a problem with their Internet connection it could be due to a major network fault, and the resolution of the customer’s problem could require restoration work on a substantial part of the network. This could involve processes that on the face of it seem to be more concerned with building infrastructure (e.g., installing network routers, replacing cables, etc.) than resolving customer problems. We might also call upon processes for testing the network and the customer’s product, which, when you think about it, might be the same processes that would be involved in “Lead-to-Cash” for testing a new product installation. If a customer orders a really complex, bespoke product, we may have to build additional business infrastructure to deliver it (e.g., provide more IT server or network capacity).

![Figure 2. Lead-to-Cash Customer Journey](http://www.bptrends.com)
The more we think about it, the more we see that the idea of an end-to-end process is rather artificial. What we are in fact talking about is the “journey” (or path) through the organization’s process landscape or through the Value Chains. Often, these are called “customer journeys” because they are associated with delivering to the customer, but, of course, the journey that the customer actually experiences will be different from the journey the business follows. Swim lane models can be useful here to show the process journey from the business point of view along with the customer interactions. We can also use the BPMN concept of public and private processes. The private process is the journey through the processes that the business operates, while the public process is the journey the customer experiences from the same processes.

Some of the processes in the landscape may only be used in one journey, while others may provide business services (e.g., a product test) to several journeys. The journey will always follow the same basic pattern (see my last BPTrends column [3]), but the actual complexity of the journey and the number of processes involved will depend on the specific circumstances. What we now see is that we can superimpose the “journeys” onto the process landscape, as shown in Figure 2. This gives us a “value view” of the business processes as we can now see which processes are directly concerned with delivering to customers (this is where end-to-end processes are very similar to Value Streams).

Chicken and Eggs

How many journeys are there in a business? Figure 3 gives us a simple view of three important journeys: “Lead-to-Cash,” “Problem-to-Resolution,” and “Concept-to-Market.” Once again, you can have a debate about whether “Concept-to-Market” really is a customer-related journey. It probably wouldn’t be thought of as Value Stream, but even if the customer isn’t the direct trigger for the journey, the journey is certainly about delivering customers’ needs, even if they don’t know they have those needs.

![Figure 3. Typical Customer Journeys](link)

If we have the concept of a journey, and we have also seen that the process landscape is still useful, which do you design first – the landscape or the journey? Well, of course, the answer is you do both together, focusing on delivering customer service and business objectives, but at the same time creating blocks of process that can be reused. I talked about reuse in last quarter’s column [3], and all of the concepts I discussed are relevant here. It can be a challenge to design...
blocks of process that can be reused, but combining the customer journeys with the process landscape highlights where there are opportunities for reuse and where the most value can be gained.

**Time for Cinderella to go to the Ball**

There is a further question: Which of the customer journeys do you focus on first? The traditional answer is “Lead-to-Cash.” After all, this is the main process that deals with the customer and generates business revenue, so getting this right is clearly a priority. Next in line is “Problem-to-Resolution.” Once you have sold the customer a product you want to make sure that you can fix it if it goes wrong in order to keep the customer happy. Dragging up the rear is “Concept-to-Market.” It would seem that you can take a more leisurely view of this. You don’t launch new products every day and, anyway, it’s all about ideas and innovation – you don’t need a process for that, do you?

Well, I am sure you can see what’s coming. The best “Lead-to-Cash” process in the world is of limited value if the next product the business launches can’t use it! How many operational departments have been surprised when the marketing department announces the latest product launch plan and then the IT and process teams are left to try and work out how to deliver it, train the staff, and bill the customer? Of course, what often happens is that the standard infrastructure won’t support the new product and can’t be modified in time, so a stand-alone “stovepipe” solution is developed. The same happens at the next product launch, and the stovepipes proliferate. At some point in the future, after things have gotten out of control, there is an initiative to improve “Lead-to-Cash” and encourage more reuse. But this is addressing the symptoms not the cause. The cause is the lack of an effective “Concept-to-Market” that ensures that an effective “Lead-to-Cash” infrastructure is put in place and reused.

We need “Concept-to-Market” to be not just a parochial new product launch process but a holistic process that’s about business strategy, developing new products, and building the business infrastructure. The key is reuse. The roll of “Concept-to-Market” is to generate new product ideas that meet customers’ needs, align with business strategy, and reuse the corporate infrastructure. It is also responsible for building that corporate infrastructure (for reuse) and developing and enhancing it to meet future needs. Thus, “Concept-to-Market” should not follow on after “Lead-to-Cash” and “Problem-to-Resolution” – it should come before them and be responsible for designing and delivering those processes.

So “Concept-to-Market” should no longer be the “Cinderella” that is ignored at the expense of the “Lead-to-Cash” and “Problem-to-Resolution” ugly sisters, but should actually be the most important customer journey (or end-to-end process). Without an effective “Concept-to-Market” then the business will be doomed to endless stovepiped “Lead-to-Cash” processes. It’s time for the BPM prince to take “Concept-to-Market” to the ball before midnight approaches.

**References**

